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| APPLICATION NO.         | FILING DATE                          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|-------------------------|--------------------------------------|----------------------|-----------------------|------------------|
| 10/562,268              | 12/28/2005                           | Masataka Kawaguchi   | 202189-0003           | 8212             |
| 55694<br>DRINKER BI     | 7590 09/17/2008<br>DDLE & REATH (DC) | 3                    | EXAMINER              |                  |
| 1500 K STREET, N.W.     |                                      |                      | BOLDEN, ELIZABETH A   |                  |
| SUITE 1100<br>WASHINGTO | N, DC 20005-1209                     |                      | ART UNIT PAPER NUMBER |                  |
|                         | . ,                                  |                      | 1793                  |                  |
|                         |                                      |                      |                       |                  |
|                         |                                      |                      | MAIL DATE             | DELIVERY MODE    |
|                         |                                      |                      | 09/17/2008            | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/562,268 KAWAGUCHI ET AL. Office Action Summary

| Office Action Summary   | Examiner  | Art Unit  |       |  |  |  |  |
|---|---|---|-------|--|--|--|--|
|   | ELIZABETH A. BOLDEN   | 1793  |       |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address   |   |   |       |  |  |  |  |
| Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D/ Extrasions of time may be available under the provision of 37 CFR 1.1 after SSY, (6) MONTHS from the nailing date of the convenues called in 1 NO period for reply is specified above, the maximum statutory period of Failure to reply within the soft or extended period for reply will. By the Any reply received by the Office later than three months after the mailing aemed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N.<br>nely filed<br>the mailing date of this of<br>D (35 U.S.C. § 133). |       |  |  |  |  |
| Status  |   |   |       |  |  |  |  |
| 1) Responsive to communication(s) filed on 08 Ja  | nuary 2007.   |   |       |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This action is non-final.   |   |   |       |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |   |       |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |   |       |  |  |  |  |
| Disposition of Claims   |   |   |       |  |  |  |  |
| 4)⊠ Claim(s) <u>1-8</u> is/are pending in the application.  |   |   |       |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |       |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |   |       |  |  |  |  |
| 6)⊠ Claim(s) <u>1-8</u> is/are rejected.  |   |   |       |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |   |       |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | r election requirement.   |   |       |  |  |  |  |
| Application Papers  |   |   |       |  |  |  |  |
| 9) The specification is objected to by the Examine  | ,   |   |       |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |   |       |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |   |       |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |   |       |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |   |       |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |   |       |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign  | priority under 35 LLS C & 119(a)  | L(d) or (f)   |       |  |  |  |  |
| a) ⊠ All b) □ Some * c) □ None of:  |   |   |       |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |   |   |       |  |  |  |  |
| Certified copies of the priority documents have been received in Application No   |   |   |       |  |  |  |  |
| Copies of the certified copies of the prior   |   |   | Stage |  |  |  |  |
| application from the International Bureau   | •   |   | - 0   |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |   |       |  |  |  |  |
|   |   |   |       |  |  |  |  |
|   |   |   |       |  |  |  |  |
|   |   |   |       |  |  |  |  |
| Attachment(s)   | n□  | (DTG 440)   |       |  |  |  |  |
| Notice of References Cited (PTO-892)    Notice of Draftsperson's Patent Drawing Review (PTO-948)  | <li>4) Interview Summary<br/>Paper No(s)/Mail Da</li>   |   |       |  |  |  |  |
| 3) X Information Disclosure Statement(s) (PTO/SE/08)  | 5) Notice of Informal P   |   |       |  |  |  |  |

Paper No(s)/Mail Date 12/28/05, 1/8/07.

5) Notice of Informal Patent Application
6) Other: \_\_\_\_\_.

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### DETAILED ACTION

#### Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Information Disclosure Statement

The IDSs submitted 28 December 2005 and 8 January 2007 have been considered by the Examiner.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narita et al., U.S. Patent 6,468,933 in view of Kawamoto et al., U.S. 2004/0186000.

Narita et al. teach a glass substrate for display technologies. See column 1, lines 7-10.

Narita et al. teach a glass having overlapping ranges of components with instant claims 1-8. See

Abstract, column 1, lines 59-65, and column 2, lines 41 to column 4, line 21.

Narita et al. fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1-8. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05. Narita et al. does not teach the use of He and/or Ne and SO<sub>3</sub> as a fining agent addition in the glass as recited in claims 1 and 4.

Kawamoto et al. teach that glasses can have more complete fining by the use of  $SO_3$  and He during the melting process. See Abstract and paragraphs [0020]-[0027], [0030], [0032] and [0033].

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Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the glass of Narita et al. using the additional fining agents of SO<sub>3</sub> and He as taught by Kawamoto et al. because the glass of Narita et al. would have the additional fining benefits of the SO<sub>3</sub> and He of Kawamoto et al.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narita et al., U.S. Patent 6,468,933 in view of Buehl, U.S. Patent 3,622,296.

Narita et al. teach a glass substrate for display technologies. See column 1, lines 7-10.

Narita et al. teach a glass having overlapping ranges of components with instant claims 1-8. See

Abstract, column 1, lines 59-65, and column 2, lines 41 to column 4, line 21.

Narita et al. fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1-8. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05. Narita et al. does not teach the use of He and/or Ne and SO<sub>3</sub> as a fining agent addition in the glass as recited in claims 1 and 4

Buehl teaches that glasses can have more complete fining by the use of SO<sub>3</sub> and He and others during the melting process. See Abstract and column 1, lines 18-31 and column 1, line 57 to column 2, line 27.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the glass of Narita et al. using the additional fining agents of SO<sub>3</sub> and He as taught by Buehl because the glass of Narita et al. would have the additional fining benefits of the SO<sub>3</sub> and He of Buehl.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naka et al., U.S. Patent 6,508,083 in view of Kawamoto et al., U.S. 2004/0186000.

Naka et al. teach a glass substrate for display technologies. See column 1, lines 6-9.

Naka et al. teach a glass having overlapping ranges of components with instant claims 1-8. See

Abstract, column 1, line 51 to column 2, line 32, and column 3, line 35 to column 4, line 3.

Naka et al. fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1-8. However, overlapping ranges Application/Control Number: 10/562,268

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have been held to establish prima facie obviousness. See MPEP 2144.05. Naka et al. does not teach the use of He and/or Ne and SO<sub>3</sub> as a fining agent addition in the glass as recited in claims 1 and 4.

Kawamoto et al. teach that glasses can have more complete fining by the use of  $SO_3$  and He during the melting process. See Abstract and paragraphs [0020]-[0027], [0030], [0032] and [0033].

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the glass of Naka et al. using the additional fining agents of SO<sub>3</sub> and He as taught by Kawamoto et al. because the glass of Narita et al. would have the additional fining benefits of the SO<sub>3</sub> and He of Kawamoto et al.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naka et al., U.S. Patent 6,508,083 in view of Buehl, U.S. Patent 3,622,296.

Naka et al. teach a glass substrate for display technologies. See column 1, lines 6
Naka et al. teach a glass having overlapping ranges of components with instant claims 1-8.

See Abstract, column 1, line 51 to column 2, line 32, and column 3, line 35 to column 4, line 3.

Naka et al. fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1-8. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05. Naka et al. does not teach the use of He and/or Ne and SO<sub>3</sub> as a fining agent addition in the glass as recited in claims 1 and 4.

Buehl teaches that glasses can have more complete fining by the use of  $SO_3$  and He and others during the melting process. See Abstract and column 1, lines 18-31 and column 1, line 57 to column 2, line 27.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the glass of Naka et al. using the additional fining agents of SO<sub>3</sub> and He as taught by Buehl because the glass of Narita et al. would have the additional fining benefits of the SO<sub>3</sub> and He of Kawamoto et al.

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### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH A. BOLDEN whose telephone number is (571)272-1363. The examiner can normally be reached on 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jerry A Lorengo/ Supervisory Patent Examiner, Art Unit 1793 Elizabeth A. Bolden Examiner Art Unit 1793

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